

Trust Fund Flow Monitoring

Why measure flow?

How?



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Rating curve + continuous water level
= continuous water quantity prediction

Sources of error

- Water level accuracy
 - Representativeness of recorded level
 - Barometric pressure changes
 - Sensor interference (e.g., silt clog)
 - Changes in stage-discharge relationship
- Discharge measurement
 - Calibration
 - Representativeness
 - Accuracy of meter
 - Accuracy of reader
 - Changes in flow during measurement

Small watersheds more likely to show changes b/c greater % being treated, but...



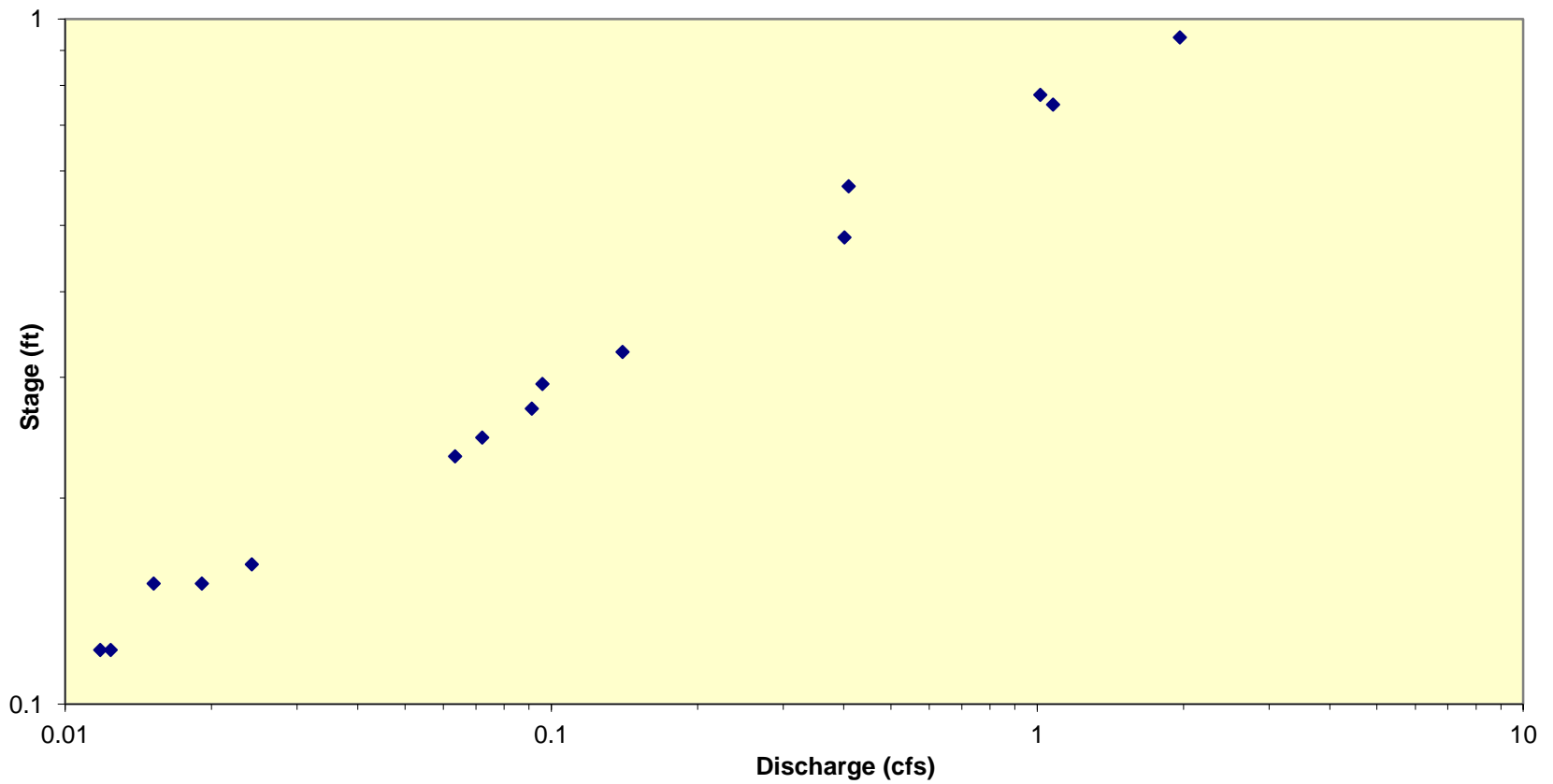
Quantifying nutrient & sediment reductions is more difficult b/c quantifying flow is problematic







Upper Brampton stage discharge curve



















Issue of CWD

















QA considerations

- Read & follow the protocols
- Read & follow instrument manual
- Calibration
- Attention to detail
- QC visits
- Data entry & handling

Discharge Measurements

- Flowmate 2000, standard cross-section
- Float method
- Weir